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A stakeholder process evaluation of a social marketing walking intervention targeting children¹

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Background and purpose

One quarter of Australian children are overweight or obese (ABS, 2010), putting them at increased risk of physical and psychological health problems (Reilly *et al.*, 2003). Overweight and obesity in childhood tends to persist into adulthood and is associated with premature death and morbidity (Reilly & Kelly, 2011). Increases in Australian children's weight have coincided with declines in active transportation, such as walking, to school (Salmon *et al.*, 2005). To address this problem, the Victorian Health Promotion Foundation (VicHealth), which is an independent statutory authority which advises government and contributes to promoting good health in Victoria (VicHealth, 2014), developed the *Walk to School* program. *Walk to School* aims to encourage primary school children in Victoria to walk to and from school more often. Walking to school is a low cost and effective means of reducing excess weight (Rosenberg *et al.*, 2006) that can be easily integrated into daily routine (Brophy *et al.*, 2011). The purpose of this paper is to present the results of the stakeholder process evaluation of *Walk to School 2013*, which forms part of a broader outcome evaluation that is currently in field. Although there is an emphasis on outcome evaluation of programs, process evaluation can be equally important in determining program success (Saunders *et al.*, 2005). Further, process evaluation to assess program delivery and utilization is explicitly recommended by two social marketing frameworks (see Lefebvre *et al.*, 1988; Walsh *et al.*, 1993).

***Walk to School 2013* program and materials**

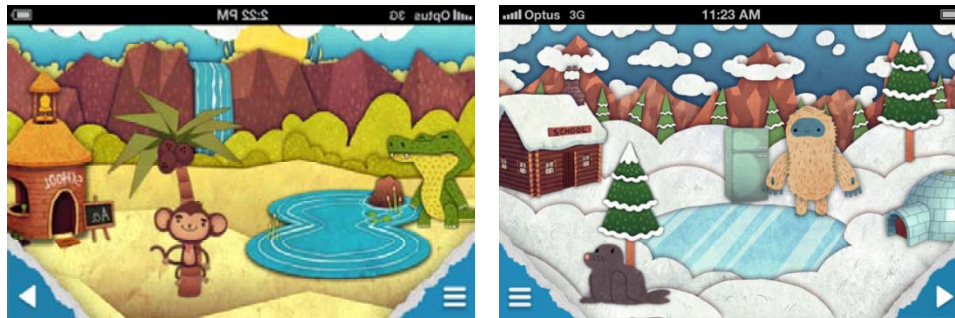
Walk to School program was first funded by VicHealth in 2006. The annual intervention encourages primary school children, typically aged 5-12 years old, to walk to and from school. In 2012, more than 14,000 students from 151 primary schools in 53 local government areas (LGA) took part in *Walk to School 2012*. *Walk to School 2013* ran during the month of November.

In 2013 VicHealth offered AUS\$5000 to AUS\$10,000 grants to local councils to promote and coordinate the program with primary schools in their area. Where a council had chosen to be involved in *Walk to School 2013*, they promoted and coordinated the campaign in their LGA. Where councils chose not to coordinate *Walk to School 2013* in their LGA, VicHealth contacted each primary school to invite them to participate, and then liaised directly with those schools to promote *Walk to School 2013*. Schools were offered prizes for the most kilometers walked by students in each region in the form of sporting equipment to the value of AUS\$1,000. Schools could also gain recognition for promoting physical activity through the *Healthy Together Achievement Program*, which provides supporting resources to help coordinate activities to promote the health of students. VicHealth provided promotional packs, including posters and information for school newsletters. A *Walk to School 2013* Facebook site (<https://www.facebook.com/WalkToSchool>) and Twitter account (@WalkToSchoolVic) were also established.

Students were encouraged to record their walks through three alternate means thereby catering to different preferences. The three alternatives were: 1) online via the *Walk to School* website (<http://www.walktoschool.vic.gov.au/>), 2) reporting via an app (available for iPhones and Android devices) called *Walk to School* or 3) via a classroom poster. Data entry was typically facilitated by teachers, who were also encouraged to run walking-related activities in their classrooms using the resource

kit provided. All participating students were rewarded for walking through the game design of the *Walk to School* app. The game involved entering actual walking activity through different imaginative worlds, with high levels of walking resulting in the unlocking of characters/assets (see Figure 1). In addition, weekly competitions (e.g., *Walk to School* story competition, etc.) were run throughout November to maintain engagement and to reward outstanding participation by schools and/or individuals.

Figure 1. *Walk to School* app screenshots



Methods

An evaluation of *Walk to School 2013* was undertaken by Social Marketing @ Griffith (SM@G). This included both a process and a longer term outcome evaluation. The process evaluation forms the focus of this paper. The process evaluation was conducted via three online surveys, which were administered to the three key stakeholder groups involved in the program, namely councils, schools and carers of primary school children in Victoria in the first two weeks of December 2013, immediately following the delivery of *Walk to School 2013*. The online surveys comprised both open and closed questions and all three surveys were pre-tested via an informal expert review with social marketing researchers prior to main survey administration. The closed questions were constructed in the form of a seven point Likert scale. The satisfaction scale was adapted from Tam (2004) and the question measuring the intentions to participate again next year was adapted from Merom *et al.* (2005). To disseminate the surveys, VicHealth sent an email invitation to participate in the survey, which incorporated the survey link, to councils and schools. To reach carers, the link to the online survey was disseminated through multiple channels, including VicHealth's *Walk to School* website, the *Walk to School 2013* Facebook site and the *Walk to School 2013* Twitter account. Carers were offered a chance to win one of twenty AUS\$30 vouchers for their participation in the survey. The sample size achieved (and where possible *Walk to School* penetration rates) for councils, schools and carers are reported in Table 1. There are 79 LGAs and 1,552 primary schools in Victoria (Department of Education and Early Childhood Development, 2013). Therefore, response rates of 66% and 14%, respectively, were achieved. Penetration rates - the proportion of council and primary schools engaged in the program - were 54% and 12.5% respectively.

Table 1. Sample characteristics

Variables	Population N	Sample size N	<i>Walk to School</i> participation N	Penetration rate %
Councils	79	52	44	54%
Schools	1,552	214	194	12.5%
Principals		65		
Teachers		76		
<i>Walk to School 2013</i> Coordinators		73		
Carers		161	64	

A mixed method approach was taken to analyze the quantitative and qualitative data provided by the survey. Descriptive statistics, one-way Anova and t-tests were employed to examine the three stakeholder groups' assessment of *Walk to School 2013*. Missing data was excluded pairwise, a valid means of dealing with missing data (Schafer & Graham, 2002), from the analyses. Thematic analysis, with the assistance of NVivo, was undertaken on the qualitative data to gain further insight. Thematic analysis was conducted generally in accordance with Braun and Clarke (2006). To identify themes relevant to understanding the reasons for stakeholders' satisfaction or dissatisfaction with *Walk to School 2013*, open and in vivo coding of the data formed the foundation of first cycle coding. This was followed by pattern coding to collate or group codes on the basis of similarity and/or correspondence (Braun & Clarke, 2006; Saldana, 2009).

Results

All three stakeholder groups were satisfied with their overall experience with *Walk to School 2013* (see Table 2). Further, representatives from schools and councils, as well as carers, felt that they enjoyed their experience with *Walk to School 2013* (see Table 2). A one-way ANOVA reveals no statistically significant difference between the mean satisfaction and enjoyment levels across the three stakeholder groups at the $p < .05$ level.

Table 2. Descriptive analysis

Variables	Carers <i>M (SD)</i>	School representatives <i>M (SD)</i>	Council representatives <i>M (SD)</i>	F/t score
How do you feel about your ... overall experience with <i>Walk to School 2013</i> ? [1-Very dissatisfied to 7-Very satisfied]	N=62 5.8(1.5)	N=194 6.1(1.2)	N=44 6.0(1.1)	1.408
How do you feel about your ... overall experience with <i>Walk to School 2013</i> ? [1-We did not enjoy it at all to 7-We enjoyed it very much]	N=61 5.9(1.3)	N=194 6.2(1.1)	N=44 6.0(1.0)	2.392
How easy or difficult was it for your ... to administer <i>Walk to School 2013</i> ? [1-Very difficult to 7-Very easy]	-	N=194 5.9(1.3)	N=44 5.6(1.5)	1.561
If <i>Walk to School</i> was held again next year, how likely or unlikely would you be to participate? [1-Extremely unlikely to 7-Extremely likely]	N=161 5.6(2.0)	N=213 6.3(1.3)	N=52 5.9(1.4)	8.647**

Note. * $p < 0.5$; ** $p < .001$

Walk to School 2013 satisfaction

Walk to School 2013 provided both carer and child benefits, and this seemed to contribute to carers' satisfaction with and enjoyment of the program. As one respondent summarized it, walking to school *"Enabled me to get to work early/on time without rushing. Gave my son more of a sense of independence"* (Carer, ID 110). Another respondent emphasized their enjoyment of the program: *"Love the family time together to talk and explore on the way home"* (Carer, ID 133). Further, respondents from schools appeared to derive satisfaction from the ease with which they could perform their role in the intervention, together with the enjoyment they derived from participating. As one of the respondents stated: *"A great community activity that was easy to promote"* (School representative, ID 66).

Council representatives primarily focused on their satisfaction with the process of implementing *Walk to School 2013*, which included building stronger relationships with local schools. This is highlighted by a statement from one of the respondents: *"It was a very easy process and a great way to enable Council to work with schools to support initiatives"* (Council representative, ID 48). This theme of building networks within the community was also apparent in the responses of carer and school stakeholder groups, where it appears that the sense of community engendered by the program contributed to its enjoyment. For example:

"Walking is great and it's a great thing to do with others" (Carer, ID 37).

"We found it was a great community event with lots of parents walking with their kids. We met at the local train station and all walked together from there..." (School representative, ID 40).

Walk to School 2013 administration

In terms of the program administration, representatives of both councils and schools reported that *Walk to School 2013* was easy to administer (see Table 2). An independent samples t-test indicated no statistically significant difference between the mean scores for councils and schools. However, the results were nearing significance. The qualitative data highlight that programs such as *Walk to School* should be mindful of their timing and work load requirements. It also suggests that one way in which to negate the resources and time costs of program implementation is ensuring that stakeholders feel supported.

“November is a very busy time of the year with reports and lots of other school commitments. However, we did receive a lot of support from our Council” (School representative, ID 47).

“We loved it. It was a great value add to our Healthy Together children's settings and place-based work. The only challenge was the resource intensity required, especially the admin related tasks” (Council representative, ID 62)

“Very well organised, with heaps of resources and support from VicHealth” (Council representative, ID 75).

Walk to School 2014 intentions

Respondents from all three stakeholder groups in this 2013 survey indicated a positive intention to participate in *Walk to School 2014* on average (see Table 2). The results in Table 3 indicate a moderate to strong positive association between whether the stakeholder groups' satisfaction and enjoyment of *Walk to School 2013* and their intention to participate in *Walk to School 2014*.

Table 3. Pearson correlations

Variables	V1	V2	V3
V1.How do you feel about your ... overall experience with <i>Walk to School 2013</i> ? [1-Very dissatisfied to 7-Very satisfied]	1		
V2.How do you feel about your ... overall experience with <i>Walk to School 2013</i> ? [1-We did not enjoy it at all to 7-We enjoyed it very much]	.719**	1	
V3.If <i>Walk to School</i> was held again next year, how likely or unlikely would you be to participate?[1-Extremely unlikely to 7-Extremely likely]	.452**	.473**	1

Note. * $p < 0.5$; ** $p < .001$

A one-way ANOVA reveals a significant difference between the stakeholder groups in terms of their future intention to participate. The post hoc tests of Tukey HSD and Games-Howell reveal a significant difference between schools and carers intention to participate at the $p < .05$ level, with schools more likely to participate in *Walk to School 2014* than carers. Further investigation (see Table 4) reveals a significant difference between carers whose child participated, compared to carers whose child did not participate, in *Walk to School 2013*. This same pattern is evident across schools and councils. Councils that participated in *Walk to School 2013* differed significantly in terms of their intention to participate in *Walk to School 2014* from councils that did not. Schools that participated in *Walk to School 2013* differed significantly from schools that did not. Overall, these result highlight that

stakeholders that participated in *Walk to School 2013* are more likely to participate in *Walk to School 2014*.

Table 4. Intention to participate

Stakeholder group	Participated in <i>Walk to School 2013</i> <i>M (SD)</i>	Did not participate in <i>Walk to School 2013</i> <i>M (SD)</i>	t score
Carers	6.6 (1.1)	4.5 (2.0)	6.226**
Council representatives	6.2 (1.0)	4.0 (2.1)	2.982*
School representatives	6.4 (1.0)	4.3 (2.1)	4.350**

Note. * $p < 0.5$; ** $p < .001$

Impact

This process evaluation shows that the *Walk to School 2013* program's three key stakeholder groups, namely councils, schools and carers, were satisfied with their overall experience with the program. The evaluation indicates that *Walk to School 2013* was able to achieve a high level of satisfaction by offering benefits that were valued by each of these groups. The research further draws attention to the fact that the benefits, or sources of satisfaction, sought can be different across stakeholder groups. This highlights the complexity of implementing a behaviour change program that requires the direct involvement of multiple stakeholder groups. The process evaluation suggests that stakeholders' satisfaction and enjoyment of the program leads to positive future intentions of ongoing participation in the program. This is consistent with commercial marketing research which shows a direct link between satisfaction and loyalty (e.g., McDougall & Levesque, 2000). Continued participation in programs may be important to ensure behaviour change is maintained over time. Last, the research highlights that whilst retention of existing participants in the program is important, it is also essential to ensure that resources are expended to acquire additional participants for programs that operate over time. The data shows that current participants in the program were more likely than non-participants to engage with the program in the future. This is consistent with the commercial marketing principle of allocating sufficient resources toward the acquisition and retention of customers (Reinartz *et al.*, 2005). Overall this research provides further evidence for the importance of undertaking process evaluation, particularly of programs delivered over time and requiring involvement from multiple stakeholders, by showing the manner in which the program is implemented can affect important outcomes like ongoing participation in the program. The research also provides initial evidence for the potential usefulness of commercial marketing theory in understanding and improving the process of delivering social marketing programs.

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